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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/993,328

11/06/2001

Vincent Palermo

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02/21/2003

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EXAMINER

LEE, CHI HO A

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,328

Applicant(s)

PALERMO ET AL.

Examiner

Andrew Lee

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-106 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-106 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Reissue Applications

1. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.
2. Claims 5-106 are rejected as being based upon a defective reissue oath under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 5-8, 12, 18, 20, 31-34, 37, 40, 42-44, 46, 48, 49, 54, 55, 57-59, 62, 67-69, 73-75, 79, 80, 82-84, 87, 92-94, 98-100, and 105 are rejected under 35 U.S.C. 102(e) as being anticipated by Gordon et al U.S. Patent Number 5,577,026.

Re Claims 5, 57, Gordon et al teaches the first device (a first unit) transmitting/receiving to the second device (a second unit) via TDMA channels and inductive coupling between the antenna systems 24 & 26 (first and second transducer systems) (See col. 4, lines 24-32), wherein inductive coupling between the 24 & 28 generates inductive field for communication; fig 3 teaches the antenna assemble 35 includes micro-strip conductors (multiple transducers) (See col. 6, lines 6-32); fig 6 teaches the first and second devices transmitting/receiving during its associated time slots (channels).

Re Claims 6, 58, 83, refer to Claim 5, wherein it is inherent that the magnetic field varies during transmission.

Re Claims 7, 33, refer to Claim 5, fig 4a teaches 3 pairs of conductors so as to define 3 separate data transmission channels and position to reduce interference (See col. 7, lines 1-7).

Re Claims 8, 34, 59, 84, refer to Claim 7, wherein the micro-strip conductors are positioned 180 degrees (See col. 6, lines 49-55).

Re Claims 12, 67, 68, 92, 93 refer to Claim 5, wherein both devices are portable transceiver.

Re Claims 18, 54, 55, 79, 80, 105 refer to Claim 5, wherein fig 6 teaches transmitting/receiving on associated time slots via frequency modulator.

Re Claims 20, 37, 62, 87, the wireless link between first and second devices support two-way half duplex communication.

Re Claims 31, 48, 49, 73-75, 82, 98-100, refer to Claim 5, wherein synchronization data is transmitted over the wireless link (See col. 7, lines 39-52).

Re Claims 32, 46, refer to Claim 5, wherein the Ethernet header includes the sync information in bits (preamble field).

Re Claims 40, 42, 43, refer to Claim 5, wherein the devices are mobile (change in orientation).

Re Claims 44, 69, 94 refer to Claim 5, wherein the device is connected to the Ethernet network (communication network) providing a logical connection over the wireless link.

5. Claims 11, 16, 41, 66, 91, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al U.S. Patent Number 5,577,026.

Re Claims 11, 16, 41, 66, 91, and 104, fig 6 teaches selecting a carrier frequency for modulating the signal. One skilled in the art would have been motivated to select the carrier frequency to avoid interference between other carrier frequencies.

6. Claims 13, 19, 39, 47, 64, 72, 89, and 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al U.S. Patent Number 5,577,026 in view of Topholm U.S. Patent Number 5,202,927.

Re Claims 13, 19, 39, 47, 64, 72, 89 and 97, Examiner takes official notice that Ethernet protocol support voice transmission. Gordon et al fails to explicitly teach the Concha type headset disposed on the second unit. However, Topholm teaches the wireless Concha type headset coupling the base unit 1 (see fig 1). One skilled in the art

would have been motivated to include the Concha type headset on to the voice-transmitting device for hands free operations.

7. Claims 15, 17, 53, 56, 78, 81, 103, and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al U.S. Patent Number 5,577,026.

Re Claims 15, 17, 53, 56, 78, 81, 103 and 106, Examiner takes official notice compressing/encrypting data is known in the art and available to one ordinary skilled to converse bandwidth and to facilitate security respectively. Hence, one skilled in the art would have been motivated to compress data to converse bandwidth and encrypt data for security.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent Number 5,069,210 teaches magnetic coupling employing FDMA;

U.S. Patent Number 4,166,470 teaches magnetic coupling employing TDMA.

Allowable Subject Matter

9. Claims 9, 10, 14, 18-30, 35, 36, 38, 45, 50, 51, 52, 60, 61, 63, 65, 70, 71, 76, 77, 85, 86, 88, 90, 95, 96, 101, and 102 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As prior art 5,577,026 a TDMA system with a inductive communication between the transducers, in combination with claims 6 & 9, 31 & 45, 57 & 70 and 83 & 95, prior

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art fails to teach the first device with a single transducer and a second device with a plurality of transducer wherein the second device selecting a transducer of the first unit to generate a varying magnetic field depending on which of the multiple transducers in the first unit receives a strongest signal from the second unit.

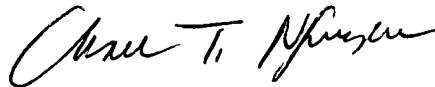
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



AL
February 13, 2003



CHAU NGUYEN
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